****

MPSRCH (TM)

****

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Dec 23 10:12:15 1999; MasPar time 3.26 Seconds
39.097 Million cell updates/sec

Tabular output not generated.

Title: >US-09-177-843-2
Description: (1-6) from US09177843.pep
Perfect Score: 41
Sequence: 1 GRGESP 6

Scoring table: PAM 150
Gap 15

Searched: 170751 seqs, 21266608 residues

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: a-geneseq35
1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7
8:part8 9:part9 10:part10 11:part11 12:part12 13:part13
14:part14 15:part15 16:part16 17:part17 18:part18
19:part19 20:part20 21:part21 22:part22 23:part23
24:part24 25:part25 26:part26 27:part27 28:part28
29:part29 30:part30 31:part31 32:part32 33:part33
34:part34 35:part35 36:part36 37:part37 38:part38
39:part39

Statistics: Mean 13.673; Variance 32.713; scale 0.418

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description	Pred. No.
1	41	100.0	6	39	W86168	Peptide used in gel c	7.31e+01
2	41	100.0	6	36	W66843	Peptide useful for al	7.31e+01
3	41	100.0	6	19	W07429	Control peptide used	7.31e+01
4	41	100.0	6	14	R79079	Integrin binding cont	7.31e+01
5	41	100.0	6	18	R99890	Control synthetic pep	7.31e+01
6	41	100.0	6	1	R04613	Antiviral agent.	7.31e+01
7	41	100.0	6	13	R71457	Control hexapeptide t	7.31e+01
8	41	100.0	6	25	W11185	Control peptide.	7.31e+01
9	41	100.0	6	18	W03491	Alpha(5)-Beta(1) inte	7.31e+01
10	41	100.0	6	28	W34090	Peptide SEQ ID NO:2 f	7.31e+01
11	41	100.0	8	31	W48562	Integrin receptor ant	7.31e+01
12	40	97.6	6	39	W86167	Peptide used in gel c	9.97e+01
13	40	97.6	6	35	W71248	Peptide sequence of t	9.97e+01
14	40	97.6	6	35	W79658	Cyclo(1,6)-Gly-Arg-Gl	9.97e+01
15	40	97.6	6	7	R37029	Peptide for isolating	9.97e+01
16	40	97.6	6	29	W45920	Control peptide #7.	9.97e+01
17	40	97.6	6	5	R27033	Peptide lipid contg.	9.97e+01
18	40	97.6	6	14	R79077	Alpha5/beta1 integrin	9.97e+01
19	40	97.6	7	39	W86169	Peptide used in gel c	9.97e+01
20	40	97.6	7	36	W66819	Peptide used in purif	9.97e+01
21	40	97.6	8	4	R21014	Cyclised integrin rec	9.97e+01
22	40	97.6	10	7	R37836	Cell adhesion motif e	9.97e+01
23	40	97.6	10	7	R36718	Adhesion formation pr	9.97e+01
24	40	97.6	10	27	W31337	Quaternary amine lipi	9.97e+01
25	40	97.6	12	31	W48513	Integrin receptor ant	9.97e+01
26	40	97.6	20	38	W81846	Fibronectin-like pept	9.97e+01
27	40	97.6	39	22	W06684	Protamine-like peptid	9.97e+01
28	40	97.6	48	19	R95141	Collagen like protein	9.97e+01
29	40	97.6	106	7	R35674	Tryptophan aporepress	9.97e+01
30	40	97.6	106	7	R35553	Tryptophan aporepress	9.97e+01
31	40	97.6	108	7	R35697	Tryptophan aporepress	9.97e+01
32	40	97.6	108	7	R35542	Tryptophan aporepress	9.97e+01
33	40	97.6	111	7	R35685	Tryptophan aporepress	9.97e+01
34	40	97.6	112	7	R35686	Tryptophan aporepress	9.97e+01
35	40	97.6	274	8	R40163	Human FN peptide frag	9.97e+01
36	40	97.6	277	24	W13566	Human fibronectin pro	9.97e+01
37	40	97.6	302	25	W33352	Oligopeptide C277-CS1	9.97e+01
38	40	97.6	330	3	R15146	EGF-fibronectin fusio	9.97e+01
39	40	97.6	332	3	R15145	EGF-fibronectin fusio	9.97e+01
40	40	97.6	337	4	R20129	SEQ ID No. 4 of the c	9.97e+01
41	40	97.6	411	2	R11672	Cell adhesive and fib	9.97e+01
42	40	97.6	489	25	W33343	Protein used in devel	9.97e+01
43	40	97.6	549	11	R60349	Chimeric inhibitory F	9.97e+01
44	40	97.6	574	25	W33349	Oligopeptide CH-296.	9.97e+01
45	40	97.6	2386	34	W63171	Amino acid sequence o	9.97e+01

ALIGNMENTS

RESULT 1
ID W86168 standard; peptide; 6 AA.
AC W86168;
DT 04-MAR-1999 (first entry)
DE Peptide used in gel contracton assays.
KW Wound contraction; reduction; inhibition; tissue regeneration; scar;
KW wound; joint motion; body deformation; gel contraction.
OS Synthetic.
PN US5851994-A.
PD 22-DEC-1998.
PF 06-JUN-1995; 473025.
PR 06-JUN-1995; US-473025.
PR 28-APR-1994; US-234979.
PA (LJOL-) LA JOLLA CANCER RES FOUND.
PI Polarek J, Schreiber R;
DR WPI; 99-080478/07.
PT Inhibition of wound contraction - with peptide derivatives rich in
PT basic amino acids
PS Example 2; Column 13; 16pp; English.
CC The invention provides methods for reduction or inhibition of wound
CC contraction that comprises administration of a peptide having more than
CC 3 consecutive basic amino acid residues. Alternatively, the peptide
CC contains the amino acid sequence Arg-Gly-Asp and a basic amino acid
CC sequence, or the peptide comprises 6-30 amino acids in which at least
CC 4 out of a sequence of 6 consecutive amino acids are basic amino acids.
CC The method is used to allow normal tissue regeneration without excessive
CC scar formation which, in the case of large wounds, can result in loss of
CC joint motion or major body deformation. This peptide is used in gel
CC contraction assays along with the claimed peptides (W86170-83) to
CC determine the activity of a peptide to reduce or inhibit gel contraction.
SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 39; Length 6;
Best Local Similarity 100.0%; Pred. No. 7.31e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6
```

```
RESULT    2
ID   W66843 standard; peptide; 6 AA.
AC   W66843;
DT   10-DEC-1998  (first entry)
DE   Peptide useful for altering bone resorption.
KW   bone resorption; pharmacore; angiogenesis; restenosis; integrin receptor;
KW   alpha v beta 3 integrin receptor; osteoclast.
OS   Synthetic.
PN   US5807819-A.
PD   15-SEP-1998.
PF   12-APR-1995; 421698.
PR   12-APR-1995; US-421698.
PR   15-APR-1994; US-227316.
PR   08-SEP-1994; US-303052.
PA   (LJOL-) LA JOLLA CANCER RES CENT.
PI   Cheng S, Ingram R, Mullen D, Tschopp JF;
DR   WPI; 98-555601/47.
PT   Use of peptide derivatives which can alter integrin receptor binding
PT   - for altering bone resorption, treating angiogenesis or restenosis
PT   and altering integrin receptor mediated interactions
PS   Example 2; Figure 2A; 87pp; English.
CC   A new method is claimed for altering bone resorption. It comprises
CC   administration of a peptide of formula: X1X2X3X4GDX5X6X7X8; where X1 =
CC   R1R2N or 0-10 amino acids (optionally protected by acetylation at the N-
CC   terminus); X2 = absent or 1 amino acid; X3 = absent or 1 or 2 amino
CC   acids; X4 = N-Me-Arg; X5 = residue which provides an ionic interaction
CC   with an integrin receptor, or is Msa, Psa or Tfsa;  X6 = residue which
CC   has an aliphatic side chain; a non-natural amino acid that is
CC   hydrophobic; or Thr; X7 = a residue capable of forming a bond (i) with a
CC   bridging amino acid of X2, (ii) with X3 when X2 is absent, or (iii) with
CC   X4 when X2 and X3 are absent, to conformationally restrain the peptide;
CC   X8 = NR3R4; OR5; or 0-10 amino acids, optionally protected as an amide at
CC   the C- terminus; R1, R3-R5 = H or alkyl; R2 = H, alkyl, alkyl-CO or
CC   phenyl-CO. The peptides are useful for inhibiting bone resorption,
CC   angiogenesis or restenosis, and for altering integrin receptor-mediated
CC   interactions, especially alpha v beta 3 integrin receptor-mediated
CC   binding of cells to a matrix. They may be used for reducing or inhibiting
CC   osteoclast binding to a matrix. The present sequence represents an
CC   example of a peptide disclosed in the specification.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 36;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    3
ID   W07429 standard; peptide; 6 AA.
AC   W07429;
DT   21-JAN-1997  (first entry)
DE   Control peptide used in tumour invasion-inhibition assay.
KW   Tumour invasion; extracellular matrix; ECM; metastasis; RGD sequence;
KW   cancer; inhibition; control.
OS   Synthetic.
PN   US5547936-A.
PD   20-AUG-1996.
PF   22-NOV-1983; 554821.
PR   22-NOV-1983; US-554821.
PR   17-JUN-1985; US-744981.
PR   10-MAR-1988; US-166530.
PR   09-SEP-1988; US-242713.
PR   25-FEB-1991; US-660526.
PR   10-APR-1991; US-683585.
PR   08-OCT-1991; US-773106.
PR   19-JUN-1992; US-902742.
PR   17-DEC-1993; US-169743.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Gehlsen KR,  Pierschbacher MD,  Ruoslahti EI;
DR   WPI; 96-392651/39.
PT   Inhibiting tumour cell invasion through an extracellular matrix -
PT   using peptide contg. the RGD sequence, partic. for preventing tumour
PT   metastasis
PS   Example 3; Column 7-8; 8pp; English.
CC   W07429 is a control peptide used in an assay for testing peptides
CC   for tumour-invasion inhibitory activity. The peptides suspected of
CC   having this ability contained the RGD sequence (Arg-Gly-Asp). The
CC   control did not and was not expected to show any inhibitory action.
CC   Other peptides tested (see W07430-W06433) did show inhibitory
CC   activity, these peptides can be used to treat cancer and to prevent
CC   metastasis, in partic. invasion of the extracellular matrix (ECM).
CC   The peptides are also soluble.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 19;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    4
ID   R79079 standard; peptide; 6 AA.
AC   R79079;
DT   24-JAN-1996  (first entry)
DE   Integrin binding control peptide.
KW   High affinity; integrin binding peptide; alpha5/beta1; alphav/beta5;
KW   alphav/beta3; RGD; stable configuration; wound healing;
KW   osteoclast attachemnt; bone; angiogenesis; metastasis; tumour;
KW   smooth muscle cell migration.
OS   Synthetic.
PN   WO9514714-A1.
PD   01-JUN-1995.
PF   22-NOV-1994; U13542.
PR   24-NOV-1993; US-158001.
PR   04-AUG-1994; US-286861.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Koivunen E,  Ruoslahti E;
DR   WPI; 95-206899/27.
PT   High affinity integrin binding peptides - can be used to attach
PT   cells to a substrate, inhibit the attachment of osteoclasts to bone,
PT   promote wound healing, inhibit angiogenesis, metastasis of tumours
PT   and migration of smooth muscle cells
PS   Example 6; Page 29; 86pp; English.
CC   The sequences given in R76185-200 and R79073-94 are high affinity
CC   integrin binding peptides which bind to various integrins.  Peptides
CC   which bind to alpha5/beta1 integrins contain the motifs given in
CC   R76185-86 and peptides which bind to alphav/beta5 and alphav/beta3
CC   integrins contain the motif given in R76187.  Alphav/beta5 integrins
CC   are also bound by RGD containing peptides.  These peptides assume a
CC   conformationally stabilised configuration which is due to the
CC   formation of a disulphide bond, a peptide bond or a lactam bond.
CC   These peptides may be used for isolating the complementary integrin
CC   from a sample mixture by contacting them under ionic conditions to
CC   allow binding of the integrin to the peptide and then separating the
CC   integrin from the peptide.  They can be used for attaching cells to
CC   a substrate, by binding them to the substrate with the cell.  The
CC   peptides promote wound healing when applied locally and inhibit the
CC   attachment of osteoclasts to bone.  They inhibit angiogenesis,
CC   metastasis of tumours and migration of smooth muscle cells.  This
CC   peptide had no effect on integrin binding and was used as a control.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 14;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6
```

```
RESULT    5
ID   R99890 standard; peptide; 6 AA.
AC   R99890;
DT   05-NOV-1996  (first entry)
DE   Control synthetic peptide ligand.
KW   fibrinogen; blood clotting; GPIIb-IIIa receptor; binding; complex;
KW   epitope; exposed; monoclonal antibody.
OS   Synthetic.
PN   US5470738-A.
PD   28-NOV-1995.
PF   08-JUL-1987; 070953.
PR   08-JUL-1987; US-070953.
PR   31-MAR-1988; US-175342.
PR   05-OCT-1989; US-417565.
PR   04-OCT-1993; US-131320.
PA   (SCRI ) SCRIPPS RES INST.
PI   Frelinger AL,  Ginsberg MH,  Plow EF;
DR   WPI; 96-019874/02.
PT   Monoclonal antibodies specific for ligand-bound GPIIb-IIIa receptor
PT   - useful for detection of clotting disorders and thrombi
PS   Example 5; Column 25; 20pp; English.
CC   Monoclonal antibodies specific for a ligand-induced binding site on
CC   GPIIIa, esp. one induced in a platelet-associated GPIIb-IIIa/fibrinogen
CC   complex are claimed.  The MAb binds an epitope exposed upon binding of
CC   the ligand and receptor.  The epitope is not present on non-bound ligand
CC   or receptor.  The MAbs are useful to prevent blood clotting and in
CC   diagnostics. The present sequence is a synthetic peptide ligand used to
CC   show the specificity of the antibody-bindng only in association with
CC   RGD-contg. ligands.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 18;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    6
ID   R04613 standard; protein; 6 AA.
AC   R04613;
DT   05-SEP-1990  (first entry)
DE   Antiviral agent.
KW   Antiviral; M2; poliovirus; polio; heatitis.
OS   Synthetic.
PN   J02078631-A.
PD   19-MAR-1990.
PF   14-SEP-1988; 228843.
PR   14-SEP-1988; JP-228843.
PA   (NIHA) Nippon Mining KK.
DR   WPI; 90-129060/17.
PT   Antiviral agent contg. tri:peptide (unit) -
PT   of basic aminoacid, then alanine, glycine or sarcosine, and
PT   acidic aminoacid, effective against virus with protein-terminated DNA
PT   or RNA.
PS   Disclosure; 4pp; Japanese.
CC   Peptide is effective against inhibiting propogation of DNA or RNA
CC   bonded, protein containing viruses eg. Poliovirus, Hepatitis virus.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 1;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    7
ID   R71457 standard; peptide; 6 AA.
AC   R71457;
DT   20-OCT-1995  (first entry)
DE   Control hexapeptide to measure transmembrane force transfer.
KW   fibronectin; cytoskeleton; transmembrane force transfer; diagnostic;
KW   characterise cell; mechanical stimulation; ferromagnetic bead.
OS   Synthetic.
PN   WO9506248-A.
PD   02-MAR-1995.
PF   25-AUG-1994; U09685.
PR   25-AUG-1993; US-112757.
PA   (CHIL-) CHILDRENS MEDICAL CENT.
PA   (HARD ) HARVARD COLLEGE.
PI   Butler JP,  Fredberg JJ,  Ingber DE,  Wang N;
DR   WPI; 95-106940/14.
PT   System for applying mechanical loads to specific cell surface
PT   molecules  - using ferromagnetic beads coated with attachment
PT   molecules, and alignment and twisting magnetic fields, e.g. for
PT   screening therapeutic agents, toxins etc.
PS   Example 1; Page 19; 42pp; English.
CC   The system of the invention is used to determine the effect of
CC   mechanical stimulation of mols. present on a cell surface.
CC   Ferromagnetic microbeads are coated with attachment mols. eg. matrix
CC   mols., etc. that physically interconnect with distinct cytoskeletal
CC   proteins. A strong external magnetic field is applied to the beads, to
CC   impose a defined mechanical stress. Transmembrane force transfer is
CC   measured and the cells observed for changes in stiffening and twisting.
CC   To demonstrate the specificity of transmembrane force transfer in
CC   living endothelial cells, a soluble synthetic peptide (R71456) was
CC   included in the culture medium as a competitior. The fibronectin
CC   peptide inhibited cytoskeletal stiffening whereas this control
CC   hexapeptide with a single amino acid substitution had no
CC   inhibitory effects.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 13;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    8
ID   W11185 standard; Peptide; 6 AA.
AC   W11185;
DT   15-JAN-1998  (first entry)
DE   Control peptide.
KW   Breast tumour homing peptide; cancer; in vivo panning; screening;
KW   phage display; drug delivery.
OS   Synthetic.
PN   WO9710507-A1.
PD   20-MAR-1997.
PF   10-SEP-1996; U14600.
PR   11-SEP-1995; US-526710.
PR   11-SEP-1995; US-526708.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Pasqualini R,  Ruoslahti E;
DR   WPI; 97-202359/18.
PT   Obtaining compound that homes to selected organ or tissue - by in
PT   vivo panning method, specifically to identify brain, kidney,
PT   angiogenic vasculature or tumour tissue homing peptide(s)
PS   Example 3; Page 64; 75pp; English.
CC   Coinjection of this synthetic inactive control peptide with phage
CC   expressing an RGD-containing breast tumour-homing peptide had no
CC   effect on the amount of phage expressing the tumour homing peptide
CC   in the tumour.  Tumour homing peptides (see W13412-52) have been
CC   selected using a novel in vivo panning method and are useful for
CC   delivering e.g. toxins, drugs and labels to selected organs or
CC   tissues.
SQ   Sequence   6 AA;
```

```
  Query Match          100.0%;  Score 41;  DB 25;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT    9
ID   W03491 standard; peptide; 6 AA.
AC   W03491;
DT   24-OCT-1996  (first entry)
DE   Alpha(5)-Beta(1) integrin binding peptide 9.
KW   Synthetic; fibronectin; vitronectin; integrin; binding motif; adhesion;
KW   extracellular matrix protein; tumour metastasis.
OS   Synthetic.
PN   US5536814-A.
PD   16-JUL-1996.
PF   27-SEP-1993; 127422.
PR   27-SEP-1993; US-127422.
PR   11-MAR-1994; US-212186.
PA   (LJOL-) LA JOLLA CANCER RES FOUND.
PI   Koivunen E,  Ruoslahti E;
DR   WPI; 96-341556/34.
PT   Synthetic integrin-binding peptide(s) - useful for inhibiting tumour
PT   metastasis, etc.
PS   Disclosure; Fig 4A; 16pp; English.
CC   Peptides W03483-508 are examples of synthetic peptides generated to bind
CC   to the fibronectin/vitronectin-binding integrin alpha(5)beta(1).  They
CC   are synthesised to contain the alpha(5)beta(1)-integrin peptide binding
CC   motifs: DGR, NGR or RGD.  The peptides interfere with the binding of
CC   fibronectin and vitronectin to this integrin and thus may be used to
CC   block integrin-mediated cell adhesion to extracellular matrix proteins,
CC   esp. to inhibit tumour metastasis.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 18;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT   10
ID   W34090 standard; peptide; 6 AA.
AC   W34090;
DT   05-MAY-1998  (first entry)
DE   Peptide SEQ ID NO:2 from WO9739773 Example 1.
KW   Beta-1 cell surface receptor; beta-1 integrin-binding domain;
KW   cancer; tenascin; inflammation; receptor stimulator; fibrin;
KW   inhibitor; leucocyte migration.
OS   Unidentified.
PN   WO9739773-A1.
PD   30-OCT-1997.
PF   22-APR-1997; U06577.
PR   22-APR-1996; US-635572.
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
PI   Loike J, Silverstein SC;
DR   WPI; 97-535582/49.
PT   Treating infection caused by in-dwelling devices - also similar
PT   methods for treating cancers coated with tenascin and treating
PT   inflammation with receptor stimulators
PS   Example 1; Page 27; 91pp; English.
CC   A novel method has been developed for treating infection caused by
CC   bacteria on the surface of an in-dwelling foreign body, over and
CC   around which fibrin has been deposited. The method comprises
CC   administration of an agent that inhibits signalling mediated by a
CC   beta 1-integrin cell surface receptor on leuoocytes. The agent enhances
CC   migration of leucocytes in and through the fibrin so that they can
CC   reach and kill the bacteria. The present sequence represents a
CC   peptide which is mentioned but not used in the present invention.
CC   Treatment with the agent overcomes the inhibitory effects of
CC   fibrin or tenascin on leucocyte migration.
SQ   Sequence   6 AA;

  Query Match          100.0%;  Score 41;  DB 28;  Length 6;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      1 grgesp 6
          ||||||
Qy      1 GRGESP 6


RESULT   11
ID   W48562 standard; peptide; 8 AA.
AC   W48562;
DT   18-AUG-1998  (first entry)
DE   Integrin receptor antagonist peptide 101.
KW   Integrin receptor antagonist; cell adhesion modulator; leukocyte;
KW   extracellular matrix; fibronectin; ARDS; thrombosis; inflammation.
OS   Synthetic.
FH   Key             Location/Qualifiers
FT   Modified_site   1
FT                   /note= "attached by 1-Adamantaneacetic acid"
FT   Disulfide_bond  1..8
PN   US5721210-A.
PD   24-FEB-1998.
PF   07-JUN-1995; 485019.
PR   04-JUN-1993; US-961889.
PR   09-JUL-1990; US-550330.
PR   09-JUL-1991; WO-U04862.
PR   07-JUN-1995; US-485019.
PA   (TANA ) TANABE SEIYAKU CO.
PI   Cardarelli PM, Chiang S, Lobl TJ;
DR   WPI; 98-168442/15.
PT   New cyclic peptide(s) and peptidomimetic compounds - are integrin
PT   receptor antagonists useful in modulating cell adhesion.
PS   Example 10; Column 46; 32pp; English.
CC   The present sequence represents a synthetic peptide which
CC   acts as an antagonist to integrin receptors.  The invention provides
CC   various synthetic peptides which act as cell adhesion modulators because
CC   they mimic extra-cellular matrix ligands or other cell adhesion ligands
CC   that bind to receptors such as integrin receptors, including fibronectin,
CC   laminin, LFA-1, MAC-1, p150,95, vitronectin and gpIIb/IIIa receptors.
CC   Some of the peptides contain the amino acid sequence Arg-Gly-Asp (RGD).
CC   Others contain non-RGD sequences, for e.g RCD sequences, and reverse
CC   orientation forms of amino acid residues.  The synthetic peptides
CC   are useful in modulating cell adhesion, including adhesion related to
CC   fibronectin, as well as leukocyte adhesion to endothelial cells.  They
CC   are also claimed to be useful in the study, diagnosis, treatment or
CC   prevention of diseases which relate to cell adhesion, e.g. adult
CC   respiratory distress syndrome (ARDS), thrombosis and inflammatory
CC   conditions.
SQ   Sequence   8 AA;

  Query Match          100.0%;  Score 41;  DB 31;  Length 8;
  Best Local Similarity 100.0%;  Pred. No. 7.31e+01;
  Matches    6;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db      2 grgesp 7
          ||||||
Qy      1 GRGESP 6


RESULT   12
ID   W86167 standard; peptide; 6 AA.
AC   W86167;
DT   04-MAR-1999  (first entry)
DE   Peptide used in gel contracton assays.
KW   Wound contraction; reduction; inhibition; tissue regeneration; scar;
KW   wound; joint motion; body deformation; gel contraction.
```

OS Synthetic.
PN US5851994-A.
PD 22-DEC-1998.
PF 06-JUN-1995; 473025.
PR 06-JUN-1995; US-473025.
PR 28-APR-1994; US-234979.
PA (LJOL-) LA JOLLA CANCER RES FOUND.
PI Polarek J, Schreiber R;
DR WPI; 99-080478/07.
PT Inhibition of wound contraction - with peptide derivatives rich in
PT basic amino acids
PS Example 2; Column 13; 16pp; English.
CC The invention provides methods for reduction or inhibition of wound
CC contraction that comprises administration of a peptide having more than
CC 3 consecutive basic amino acid residues. Alternatively, the peptide
CC contains the amino acid sequence Arg-Gly-Asp and a basic amino acid
CC sequence, or the peptide comprises 6-30 amino acids in which at least
CC 4 out of a sequence of 6 consecutive amino acids are basic amino acids.
CC The method is used to allow normal tissue regeneration without excessive
CC scar formation which, in the case of large wounds, can result in loss of
CC joint motion or major body deformation. This peptide is used in gel
CC contraction assays along with the claimed peptides (W86170-83) to
CC determine the activity of a peptide to reduce or inhibit gel contraction.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 39; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 13
ID W71248 standard; Peptide; 6 AA.
AC W71248;
DT 18-NOV-1998 (first entry)
DE Peptide sequence of the invention.
KW Hepatitis drug; integrin inhibitor; integrin binding; VLA-4; treatment;
KW hepatitis.
OS Synthetic.
PN WO9837914-A1.
PD 03-SEP-1998.
PF 26-FEB-1998; J00802.
PR 26-FEB-1997; JP-042493.
PA (TORA) TORAY IND INC.
PI Kainoh M, Moriya K, Tanaka T;
DR WPI; 98-480938/41.
PT Integrin inhibitors including antibodies, proteins, nucleic acids,
PT saccharide(s), capable of binding to integrin(s) as active
PT ingredient in remedies - for treating hepatitis, by inhibiting cell
PT adhesion
PS Example 4; Page 19; 35pp; Japanese.
CC The present sequence is used in the course of the invention. The
CC specification describes Hepatitis drugs which contain integrin
CC inhibitors as the active ingredient. These integrin inhibitors include
CC antibodies, proteins, polypeptides, peptides, nucleic acids, saccharides,
CC and their derivatives. They also include low molecular weight compounds
CC capable of binding to integrins (e.g. alpha chain type with alpha 1,
CC alpha 2, etc., or beta chain type with beta 1, beta 2, etc.),
CC particularly anti-VLA-4 antibody, VLA-4 inhibiting peptides and low
CC molecular weight VLA-4 inhibiting compounds. The products can be used
CC for treating hepatitis.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 35; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 14
ID W79658 standard; peptide; 6 AA.
AC W79658;
DT 08-DEC-1998 (first entry)
DE Cyclo(1,6)-Gly-Arg-Gly-Asp-Ser-Pro.
KW Platelet aggregation inhibitor; antithrombotic; antimetastatic; cyclic.
OS Synthetic.
FH Key Location/Qualifiers
FT Modified_site 1..6
FT /note= "the alpha-amino group of Gly(1) is condensed
FT with the carboxy of Pro(6) to give a cyclic molecule"
PN US5643872-A.
PD 01-JUL-1997.
PF 26-AUG-1994; 296621.
PR 19-DEC-1990; US-630124.
PR 23-OCT-1989; US-425906.
PR 28-SEP-1990; US-590635.
PR 26-AUG-1994; US-296621.
PA (SMIK) SMITHKLINE BEECHAM CORP.
PI Ali FE, Samanen JM;
DR WPI; 97-350267/32.
PT New peptide derivatives - are useful in inhibiting platelet
PT aggregation and clot formation, and for inhibiting reocclusion of
PT blood vessels following fibrinolytic therapy.
PS Disclosure; Column 7; 28pp; English.
CC The patent describes new cyclic peptides which have a core of formula
CC -B-Gly-Asp-, where B = a D- or L-amino acid chosen from Arg, HArg
CC (i.e. homoarginine), (Me2)Arg, (Et2)Arg and Lys (or an alpha-substituted
CC derivative of these). Cyclisation is effected through specific types of
CC covalent linkages. The cyclic peptides are platelet aggregation and clot
CC formation inhibitors. They may be used in treatment of acute myocardial
CC infarction, deep vein thrombosis, pulmonary embolism, dissecting
CC aneurysm, transient ischaemic attack, stroke, unstable angina,
CC disseminated intravascular coagulation, septicaemia, surgical or
CC infectious shock, post-operative and post-partum trauma, cardiopulmonary
CC bypass surgery, incompatible blood transfusion, abruptio placenta,
CC thrombotic thrombocytopaenic purpura, snake venom and immune diseases.
CC They may also be used for inhibiting reocclusion of blood vessels
CC following fibrinolytic therapy. They may also be used in prevention of
CC metastatic conditions.
CC The present sequence is a specific example of the new peptides.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 35; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
||| :||
Qy 1 GRGESP 6

RESULT 15
ID R37029 standard; peptide; 6 AA.
AC R37029;
DT 18-AUG-1993 (first entry)
DE Peptide for isolating cell surface receptors.
KW Affinity chromatography; matrix-linked; vitronectin receptor.
OS Synthetic.
PN US5206347-A.
PD 27-APR-1993.
PF 06-AUG-1985; 763046.
PR 06-AUG-1985; US-763046.
PR 09-SEP-1988; US-242712.
PR 13-JUL-1990; US-553355.
PA (LJOL-) LA JOLLA CANCER RES FOUND.
PI Pierschbacher MD, Ruoslahti EI;
DR WPI; 93-151781/18.
PT Cell surface receptors isolation from cell extracts - by affinity
PT chromatography using matrix linked peptide contg. arginine
PT glycine aspartic acid sequence, for serum spreading factor

PS Disclosure; Page 8; 8pp; English.
CC The peptide contains the sequence Arg-Gly-Asp, which is also present
CC in the binding site of fibronectin. The peptide is coupled to a
CC matrix and used in an affinity chromatography column. The column
CC may be used to bind the vitronectin, fibronectin, fibrinogen and von
CC Willebrand's factor receptors from osteosarcoma or other mesenchymal
CC cells and platelets. The receptors may be incorporated into
CC liposomes for drug delivery or used as prostheses where attachment
CC of extracellular matrix is required.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 7; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.97e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```
Db      1 grgdsp 6
            |||:||
Qy      1 GRGESP 6
```

Search completed: Thu Dec 23 10:12:34 1999
Job time : 19 secs.